

What is Claimed:

1. A collaborative communication system, comprising:
a plurality of endpoints configured to engage in a collaborative communication session; and
a plurality of media switches, each of the plurality of media switches configured to route messages associated with the collaborative communication session between the plurality of endpoints.
2. The collaborative communication system of claim 1, further comprising a plurality of domains, wherein each of the plurality of domains comprises one of the plurality of media switches.
3. The collaborative communication system of claim 2, wherein at least some of the plurality of domains comprise more than one of the plurality of media switches.
4. The collaborative communication system of claim 3, wherein each of the plurality of domains further comprises core services interfaced with the media switch.
5. The collaborative communication system of claim 4, wherein one of the plurality of domains comprises collaborative communication services that enable the plurality of endpoints to engage in the collaborative communication session.

6. The collaborative communication system of claim 5, wherein at least one of the plurality of domains comprises a non-core service interfaced with the media switch, the non-core service configured to make available distributed collaborative communication services that enable the plurality of endpoints to engage in the collaborative communication session.

7. The collaborative communication system of claim 6, wherein the distributed collaboration communication services comprise a file sharing service.

8. The collaborative communication system of claim 6, wherein the distributed collaboration communication services comprise a video service.

9. The collaborative communication system of claim 6, wherein the distributed collaboration communication services comprise an audio conferencing service.

10. A collaborative communication system, comprising:
a service provider domain comprising a plurality of collaborative communication services configured to enable a collaborative communication session and a service provider media switch;
a client domain comprising a client media switch, a distributed collaborative communication service, and a plurality of endpoint configured to engage in a collaborative communication session using the

plurality of collaborative communication services and the distributed collaborative communication service.

11. The collaborative communication system of claim 10, wherein the client media switch is configured to route messages associated with the collaborative communication session between the plurality of endpoints.

12. The collaborative communication system of claim 10, wherein the client domain further comprises a non-core service coupled with the client media switch the non-core service configured to allow the plurality of endpoints to access the distributed collaborative communication service through the client media switch.

13. The collaborative communication system of claim 10, wherein the distributed collaborative communication service comprises a file sharing service.

14. The collaborative communication system of claim 10, wherein the distributed collaborative communication service comprises a video service.

15. The collaborative communication system of claim 10, wherein the distributed collaborative communication service comprises an audio conferencing service.

16. The collaborative communication system of claim 10, wherein the client domain further comprises a plurality of core services.

17. The collaborative communication system of claim 16, wherein the core services comprise an authentication service configured to authenticate the plurality of endpoints and the collaborative communication session.

18. The collaborative communication system of claim 16, wherein the core services comprise presence detection service configured to maintain presence information associated with the plurality of endpoints and the collaborative communication session.

19. The collaborative communication system of claim 16, wherein the client domain comprises a second client media switch and an endpoint locator service coupled with both the first and second client media switches, the endpoint locator service configured to maintain information related to pairings between the first and second client media switches and the plurality of endpoints.

20. The collaborative communication system of claim 16, wherein the client domain comprises a second client media switch, and wherein the first client media switch is further configured to maintain information related to pairings between the first and second client media switches and the plurality of end points.

21. The collaborative communication system of claim 10, wherein one of the plurality of endpoints is configured to initiate the collaborative communication session.

22. The collaborative communication system of claim 21, wherein initiating the collaborative communication session comprises the endpoint indicating an intent to begin a collaborative communication session, receiving an determination of whether the distributed collaborative communication service or one for the plurality of communication services should be used to facility the collaborative communication session, and engaging in the collaborative communication session using the one so indicated.

23. The collaborative communication system of claim 22, wherein the client domain further comprises a presence detect service coupled with the client media switch, the presence detect service configured to receive the indication from the endpoint, determine whether the distributed collaborative communication service or one of the plurality of collaborative communication services should be used, and to communicate an endpoint address associated with the one so determined to the endpoint.

24. A collaborative communication system, comprising:

a media switch configured to route messages associated with a collaborative communication session between the plurality of endpoints;
and

a media switch service configured to enable the media switch to act as an addressable endpoint.

25. The collaborative communication system of claim 24, wherein the media switch is configured to route the messages through another media switch.

26. The collaborative communication system of claim 24, wherein each message comprises a plurality of frames.

27. The collaborative communication system of claim 24, wherein each of the plurality of endpoints is configured to make a virtual persistent connection with the media switch.

28. The collaborative communication system of claim 24, wherein the media switch is configured to allow an endpoint to access a service.

29. The collaborative communication system of claim 24, wherein each of the plurality of endpoints comprises an endpoint address associated with a specific domain, and wherein the media switch is configured to access an address authority and look up a destination endpoint address associated with a message being routed, when the

destination endpoint is associated with a domain that is different from the domain associated with the media switch.

30. A collaborative communication system, comprising:
a plurality of collaboration communication services;
a plurality of endpoints configured to engage in a collaborative communication session using the collaboration communication services;
a plurality of media switches, each of the plurality of media switches configured to route messages associated with the collaborative communication session between a plurality of endpoints; and
a presence service configured to track information related to each of the plurality of endpoints and to allow endpoints to locate and reserve the use of the plurality of collaboration communication services.

31. The collaborative communication system of claim 30, further comprising a plurality of domains, wherein each of the plurality of domains comprises one of the plurality of media switches.

32. The collaborative communication system of claim 31, wherein each of the plurality of domains further comprises core services interfaced with the media switch.

33. The collaborative communication system of claim 32, wherein one of the plurality of domains is associated with a collaborative communication service provider and comprises all of the collaborative

communication service needed for the plurality of endpoints to engage in a collaborative communication session.

34. The collaborative communication system of claim 32, wherein some of the plurality of collaborative communication services are distributed collaborative communication services, and wherein at least one of the plurality of domains comprises a non-core service interfaced with the media switch, the non-core service configured to make available distributed collaborative communication services to the plurality of endpoints.

35. The collaborative communication system of claim 34, wherein the distributed collaboration session services comprise a file sharing service.

36. The collaborative communication system of claim 34, wherein the distributed collaboration session services comprise a video service.

37. The collaborative communication system of claim 34, wherein the distributed collaboration session services comprise an audio conferencing service.

38. The collaborative communication system of claim 30, wherein the presence service is configured to receive a published presence for each of the plurality of endpoints.

39. The collaborative communication system of claim 30, wherein each of the plurality of endpoints is configured to define a set of attributes that define the presence information to be stored by the presence service for that attribute.

40. The collaborative communication system of claim 30, wherein the presence service is configured to receive from each of the plurality of endpoints subscriptions to presence information related to other endpoints.

41. The collaborative communication system of claim 40, wherein the presence service is configured to detect a change in state of the presence of an endpoint of the plurality of endpoints and inform all endpoints that subscribed to presence information related to the endpoint of the change in state.

42. The collaborative communication system of claim 40, wherein the presence service is configured to receive locate and reserve messages from an endpoint attempting to locate and reserve a collaborative communication service.

43. The collaborative communication system of claim 42, wherein the presence service is configured to synchronize the received locate and reserve messages.

44. The collaborative communication system of claim 30, wherein the presence service is configured to store presence state for each of the plurality of endpoints.

45. The collaborative communication system of claim 44, further comprising an endpoint locator comprising information related to the presence for each of the plurality of endpoints, and wherein the presence detector is configured to obtain the presence state for each of the plurality of endpoints from the endpoint locator.

46. The collaborative communication system of claim 30 wherein the presence service is configured to store entity availability for each of the collaborative communication services.

47. The collaborative communication system of claim 30, wherein the presence service is configured to store entity type for each of the plurality of endpoints.

48. The collaborative communication system of claim 30, wherein the presence service is configured to store a network address for each of the plurality of endpoints.

49. The collaborative communication system of claim 30, wherein the presence service is configured to store extended attributes for each of the plurality of endpoints.

50. A collaborative communication system domain, comprising:

a plurality of media switches, each of the plurality of media switches configured to route multi-media message generated by a plurality of endpoints to a destination endpoint; and

an endpoint locator function configured to store the connection and route information for each of the plurality of endpoints.

51. The collaborative communication system of claim 50, further comprising an endpoint locator service coupled with each of the plurality of media switches, the endpoint locator service configured to provide the endpoint locator function, and wherein each of the plurality of media switches is configured to register with the endpoint locator when the media switch is first activated.

52. The collaborative communication system of claim 50, one of the plurality of medias switches is a master media switch configured to provide the endpoint locator function, and wherein each of the other media switches is configured to register with the master media switch when the other media switches are first activated.

53. The collaborative communication system of claim 50, wherein the endpoint locator function is configured to receive a registration request from a media switch and respond to the registration

request by providing the route information for each of the plurality of endpoints.

54. The collaborative communication system of claim 50, wherein each of the plurality of media switches is configured to inform the endpoint locator function each time one of the plurality of endpoints connects with the media switch.

55. The collaborative communication system of claim 54, wherein the endpoint locator function is configured to update other media switches each time the endpoint locator function receives an update from one of the plurality of media switches.

56. The collaborative communication system of claim 50, wherein the endpoint locator function is configured to detect when one of the plurality of media switches has disconnected and to inform the rest of the plurality of media switches of the disconnect.

57. The collaborative communication system of claim 50, further comprising a backup endpoint locator function, wherein each of the plurality of switches is configured to detect when the primary endpoint locator function is not available and to register with the backup endpoint locator function in response.

58. A method for collaborative communication, comprising:

receiving locate and reserve messages from an endpoint attempting to locate and reserve a collaborative communication service; and synchronizing the received locate and reserve messages.

59. The method of claim 58, further comprising, in response to the received locate and reserve messages, determining which of a plurality of possible collaborative communication services should be used, and reserving the collaborative communication service so determined.

60. The method of claim 59, further comprising communicating an endpoint address associated with collaborative communication service so determined to the endpoint.

61. The method of claim 59, wherein determining which of a plurality of collaboration services should be used comprises determining a load associated with each of the plurality of collaborative communication services.

62. The method of claim 61, wherein determining which of a plurality of collaboration services should be used further comprises selecting the collaborative communication service with the lightest load.

63. The method of claim 59, wherein determining which of a plurality of collaboration services should be used comprises determining which of the plurality of collaborative communication services are located

in a domain associated with the endpoint and selecting a collaborative
communication services that is so located.